Metadata for Florissant Fossil Beds National Monument, Spatial Vegetation Data: Cover type / Association level of the National Vegetation Classification System

Identification_Information:
Citation:
Citation_Information:
Originator: U.S. Geological Survey
Originator: Department of the Interior
Publication_Date: 200212
Title: COVERAGE flfo -- Florissant Fossil Beds National Monument Spatial Vegetation Data: Cover type / Association Level of the National Vegetation Classification System
Geospatial_Data_Presentation_Form: vector digital data
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Florissant Fossil Beds National Monument
Publication_Information:
Publication_Place: Denver, CO
Publisher: USGS NMD, Rocky Mtn. Mapping Center
Online_Linkage: http://biology.usgs.gov/npsveg/flfo/index.html#geospatial_veg_info
Description:
Abstract: The vegetation units on this map were determined through the stereoscopic interpretation of aerial photographs supported by field sampling and ecological analysis. The vegetation boundaries were identified on the photographs by means of the photographic signature and collateral information on slope, hydrology, geography, and vegetation in accordance with the Standardized National Vegetation Classification System (October 1995). The mapped vegetation reflects conditions that existed during the specific year and season that the aerial photographs were taken. There is a margin of error inherent in the use of aerial photographs. Therefore, a detailed ground and historical analysis of a single site may result in a revision of the vegetation alliance boundaries established through photographic interpretation.
Purpose: Provide National Parks with the necessary tools to effectively manage their natural resources.
Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1995
Ending_Date: 1997
Currentness_Reference: Source photography date
Status:
Progress: Complete
Maintenance_and_Update_Frequency: None planned
Spatial_Domain:
Bounding_Coordinates:
West_Bounding_Coordinate: -105.311924
East_Bounding_Coordinate: -105.245686
North_Bounding_Coordinate: 38.941072
South_Bounding_Coordinate: 38.884129
Description_of_Geographic_Extent: Florissant Fossil Beds National Monument
Keywords:
Theme:
Theme_Keyword_Thesaurus: None
Theme_Keyword: National Vegetation Classification System
Theme_Keyword: SNVCS
Theme_Keyword: National Vegetation Classification System
Theme_Keyword: NVCS
Theme_Keyword: alliance
Theme_Keyword: community
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: Colorado
Place_Keyword: CO

Place_Keyword: Florissant
Place_Keyword: Teller County
Place_Keyword: Florissant Valley
Access_Constraints: None
Use_Constraints: Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analyses. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations or credit should be given to the U.S. Geological Survey and the National Park Service.
Point_of_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: USGS/BRD, Center for Biological Informatics
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Position: Geospatial Technology Specialist
Contact_Address:
Address_Type: physical address
Address: USGS Biological Resources
Address: Center for Biological Informatics
Address: Denver Federal Center, Building 810
Address: Room 8000, MS302
City: Denver
State_or_Province: CO
Postal_Code: 80225-0046
Country: USA
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: 303-202-4219 (org)
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Data_Set_Credit: The original collection work for this data set was by the High-Resolution Land Characterization team at Rocky Mountain Mapping Center.
Native_Data_Set_Environment: Microsoft Windows 2000 Version 5.0 (Build 2195) Service Pack 2; ESRI ArcInfo 8.2.0.700
Cross_Reference:
Citation_Information:
Originator: U.S. Geological Survey
Originator: Department of the Interior
Publication_Date: 200212
Title: COVERAGE flfo -- Florissant Fossil Beds National Monument Spatial Vegetation Data: Cover type / Association Level of the National Vegetation Classification System
Geospatial_Data_Presentation_Form: vector digital data
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Florissant Fossil Beds National Monument
Publication_Information:
Publication_Place: Denver, CO
Publisher: U.S. Geological Survey
Browse_Graphic:
Browse_Graphic_File_Name: http://biology.usgs.gov/npsveg/flfo/images/flfoveg.jpg
Browse_Graphic_File_Description: 551 Kbyte graphic in map composition layout
Browse_Graphic_File_Type: JPG

Data_Quality_Information:
Attribute_Accuracy:
Attribute_Accuracy_Report: The data set underwent vigorous attribute verification procedures to insure attribute accuracy and consistency throughout the project area. Check plots were used to compare attribution and spatial extent with the photography.
Logical_Consistency_Report: All polygon features are checked for topology using the ARC/INFO software. Each polygon begins and ends at the same point with the node feature. All nodes are checked for error so that there are no dangling features. There are no duplicate lines or polygons. All nodes will snap together and close polygons based on a specified tolerance. If the node is not within the tolerance it is adjusted manually. The tests for logical consistency are performed in ARC/INFO. All attribute codes and attributes have been checked for typographical and logical errors.
Completeness_Report: All data in the project area were photointerpreted and digitized. This includes alliances/community association classes, density classes, height classes, pattern groups, water, and unvegetated/landuse.
Positional_Accuracy:

Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report: Not Applicable
Vertical_Positional_Accuracy:
Vertical_Positional_Accuracy_Report: Not Applicable
Lineage:
Source_Information:
Source_Citation:
Citation_Information:
Originator: Sky Tech Aero Inc., North Little Rock, AR
Publication_Date: 19950827
Title: True color aerial photography of Florissant Fossil Beds National Monument
Geospatial_Data_Presentation_Form: image
Publication_Information:
Publication_Place: U.S. Forest Service
Publisher: Salt Lake City, UT
Other_Citation_Details:
Aerial photography was taken at a scale of 1:26,500.
Original media are in the form of positive transparencies. Photointerpretation was done on contact prints of the true color photos.
Source_Scale_Denominator: 26500
Type_of_Source_Media: Contact paper prints of film transparencies
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19950827
Source_Currentness_Reference: Imagery date
Source_Contribution: These aerial photographs were the basis for the photointerpretation process in the Western portion of the Monument.
Source_Citation_Abbreviation: FLFO Summer 1995 CIR Aerial Photographs.
Source_Information:
Source_Citation:
Citation_Information:
Originator: Sky Tech Aero Inc., North Little Rock, AR
Publication_Date: 19960905
Title: True color aerial photography of Florissant Fossil Beds National Monument
Geospatial_Data_Presentation_Form: image
Publication_Information:
Publication_Place: U.S. Forest Service
Publisher: Salt Lake City, UT
Other_Citation_Details: Aerial photography was taken at a scale of 1:23,700. Original media are in the form of positive transparencies. Photointerpretation was done on contact prints of the true color photos.
Source_Scale_Denominator: 23700
Type_of_Source_Media: Contact paper prints of film transparencies.
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19960905
Source_Currentness_Reference: Imagery date
Source_Contribution: These aerial photographs were the basis for the photointerpretation process in the Central portion of the Monument.
Source_Citation_Abbreviation: FLFO Fall 1996 Color Aerial Photographs.
Source_Information:
Source_Citation:
Citation_Information:
Originator: Sky Tech Aero Inc., North Little Rock, AR
Publication_Date: 19970928
Title: True color aerial photography of Florissant Fossil Beds National Monument
Geospatial_Data_Presentation_Form: image
Publication_Information:
Publication_Place: U.S. Forest Service
Publisher: Salt Lake City, UT

Other_Citation_Details: Aerial photography was taken at a scale of 1:22,000. Original media are in the form of positive transparencies. Photointerpretation was done on contact prints of the true color photos.
Source_Scale_Denominator: 22000
Type_of_Source_Media: Contact paper prints of film transparencies
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19970928
Source_Currentness_Reference: Imagery date
Source_Contribution: These aerial photographs were the basis for the photointerpretation process in the Eastern portion of the Monument.
Source_Citation_Abbreviation: FLFO Fall 1997 Color Aerial Photographs.
Source_Information:
Source_Citation:
Citation_Information:
Originator: National Park Service
Publication_Date: 19990910
Title: Boundary for Florissant Fossil Beds (FLFO) National Monument, derived from GPSed BLM survey markers (in UTM NAD27).
Geospatial_Data_Presentation_Form: vector digital data
Publication_Information:
Publication_Place: Montrose, CO
Publisher: National Park Service
Other_Citation_Details: The dataset is an ARC/INFO polygon coverage of the boundary of Florissant Fossil Beds National Monument, which was on-screen digitized using GPS positions of BLM survey markers as a background snap coverage.
Online_Linkage: ftp://ftp.ncsu.edu/pub/unity/lockers/ftp/npsftp/pub/data/flfo/flfo_bdry.e00
Type_of_Source_Media: Polygon vector data
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19990910
Source_Currentness_Reference: publication date
Source_Contribution: This ARC/INFO polygon coverage was used provide the monument extent for this and other project coverages.
Source_Citation_Abbreviation: FLFO ARC/INFO polygon coverage.
Source_Information:
Source_Citation:
Citation_Information:
Originator: Intrasearch, Englewood, CO
Publication_Date: 19830809
Title: Color Infra-red (CIR) aerial photography of Florissant Fossil Beds National Monument
Geospatial_Data_Presentation_Form: image
Publication_Information:
Publication_Place: Denver, CO
Publisher: U.S. Geological Survey
Other_Citation_Details: Aerial photography was taken at a scale of 1:24,000. Original media are in the form of positive transparencies.
Source_Scale_Denominator: 24000
Type_of_Source_Media: Contact paper prints of film transparencies
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19830809
Source_Currentness_Reference: Imagery date
Source_Contribution: Ancillary aerial photography used as collateral information.
Source_Citation_Abbreviation: FLFO CIR Aerial Photographs.
Source_Information:
Source_Citation:
Citation_Information:
Originator: Rocky Mountain Aerial Surveys, Inc., Englewood, CO
Publication_Date: 19971018

Title: Black-And-White aerial photography of Florissant Fossil Beds National Monument
Geospatial_Data_Presentation_Form: image
Publication_Information:
Publication_Place: Denver, CO
Publisher: U.S. Geological Survey
Other_Citation_Details: Aerial photography was taken at a scale of 1:12,000. Original media are in the form of positive transparencies.
Source_Scale_Denominator: 12000
Type_of_Source_Media: Contact paper prints of film transparencies
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19971018
Source_Currentness_Reference: Imagery date
Source_Contribution: Ancillary aerial photography used as collateral information.
Source_Citation_Abbreviation: FLFO Black & white Aerial Photographs.
Source_Information:
Source_Citation:
Citation_Information:
Originator: National Park Service
Publication_Date: 1998-1999
Title: Noxious Weeds
Geospatial_Data_Presentation_Form: Polygonal vector data
Publication_Information:
Publication_Place: Florissant, CO
Publisher: National Park Service
Other_Citation_Details: Polygonal vector data representing seven different noxious weeds was supplied by the NPS. The data was collected in the field during 1998 and 1999 by Florissant Fossil Beds National Monument staff who walked the weed perimeters with a GPS receiver.
Type_of_Source_Media: Polygonal vector data
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1998
Ending_Date: 1999
Source_Currentness_Reference: ARC/INFO polygon coverage.
Source_Contribution: Information incorporated into Vegetation coverage
Source_Citation_Abbreviation: FLFO Noxious Weeds Polygonal vector data.
Source_Information:
Source_Citation:
Citation_Information:
Originator: U.S. Geological Survey
Publication_Date: 2001
Title: Digital Elevation Models - Lake George, CO & Divide, CO
Geospatial_Data_Presentation_Form: vector digital data
Publication_Information:
Publication_Place: U.S. Geological Survey
Publisher: Denver
Source_Scale_Denominator: 24000
Type_of_Source_Media: digital data
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Vector digital data.
Source_Contribution: Used during project imagery orthorectification process.
Source_Citation_Abbreviation: DEM - Lake George & Divide, CO.
Source_Information:
Source_Citation:
Citation_Information:
Originator: U.S. Geological Survey

Publication_Date: 1994
Title: Digital Orthophoto Quarter-Quadrangles - Lake George SE & NE, Co and Divide SE, CO
Geospatial_Data_Presentation_Form: raster digital data
Publication_Information:
Publication_Place: Menlo Park, CA
Publisher: U.S. Geological Survey
Source_Scale_Denominator: 12000
Type_of_Source_Media: digital data
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1994
Source_Currentness_Reference: Raster digital data.
Source_Contribution: Used during project imagery orthorectification process.
Source_Citation_Abbreviation: DOQQ - Lake George SE & NE and Divide SE, CO.
Process_Step:
Process_Description: Source imagery that covers the project area and the ½-mile "environs" around the park were scanned in color at 720 dpi.
Process_Date: 2001
Process_Step:
Process_Description: Scanned imagery files were orthorectified using the Image Geometric Correction - Camera tool in ERDAS Imagine software, employing data from the DEM, DOQ, and the camera calibrations. Six orthoimages were produced from the following photographs: USDA-F 612120) 495-11, 495-13, 1095-31, 1095-33, 2095-37, and 2095-39. Using the park boundary as a reference, the ½-mile environs limit was delineated and used to subset each orthoimage to include just the area needed for mapping. The orthoimages were further combined into two mosaics, the east half and the west half, using PCI software. 2001
Process_Date: 2001
Process_Step:
Process_Description: USGS cartographers delineated general vegetation polygons, using ERDAS Imagine software and the orthoimages, based only on stereo photo interpretation. Paper plots were produced showing the resulting vector data overlaid on the mosaicked orthoimagery. These were used for the initial fieldwork.
Process_Date: 2001
Process_Step:
Process_Description: The cartographers accompanied the ecologist from e2M on reconnaissance field trips to get first-hand knowledge in the types of vegetation that exist at Florissant Fossil Beds National Monument. Field notes were hand-annotated on the paper plots of the orthoimages for future reference. The initial field trips resulted in a working list of vegetation associations. The ecologist further refined this list and updates were supplied to the cartographers.
Process_Date: 2001
Process_Step:
Process_Description: USGS cartographers remapped the vegetation polygons as raster data, using ERDAS Imagine software and the orthoimages, based on stereo photo interpretation and image analysis. Vegetation communities were identified on the basis of their color, pattern, texture, location on the landscape, and other environmental conditions. Information on noxious weeds that was provided by NPS personnel was incorporated into the data set.
Process_Date: 2001-2002
Process_Step:
Process_Description: The raster data set was converted to Arc Coverage format using the Raster to Vector tool in ERDAS Imagine. A weed tolerance of 1.0 was employed to smooth the vectors. Data set was checked to insure proper conversion. Data set was cleaned up to eliminate slivers and extremely small areas. 2002
Process_Date: 2002

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Complete chain
Point_and_Vector_Object_Count: 1826
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Label point
Point_and_Vector_Object_Count: 656
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains
Point_and_Vector_Object_Count: 655

SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Point
Point_and_Vector_Object_Count: 4

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 13
Transverse_Mercator:
Scale_Factor_at_Central_Meridian: 0.999600
Longitude_of_Central_Meridian: -105.000000
Latitude_of_Projection_Origin: 0.000000
False_Easting: 500000.000000
False_Northing: 0.000000
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 0.000003
Ordinate_Resolution: 0.000003
Planar_Distance_Units: meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Entity_Type_Label: flfo.pat
Entity_Type_Definition: Florissant Fossil Beds National Monument Vegetation Mapping Project: Vegetation Coverage Arc Attribute Table
Entity_Type_Definition_Source: USGS
Attribute:
Attribute_Label: FID
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers that are automatically generated.
Attribute:
Attribute_Label: Shape
Attribute_Definition: Feature geometry.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Coordinates defining the features.
Attribute:
Attribute_Label: AREA
Attribute_Definition: Area of feature in internal units squared.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Positive real numbers that are automatically generated.
Attribute:
Attribute_Label: PERIMETER
Attribute_Definition: Perimeter of feature in internal units.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Positive real numbers that are automatically generated.
Attribute:

Attribute_Label: FLFO#
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers that are automatically generated.
Attribute:
Attribute_Label: FLFO-ID
Attribute_Definition: User-defined feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers.
Attribute:
Attribute_Label: FLFO_
Attribute_Definition: User-defined feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers.
Attribute:
Attribute_Label: FLFO_ID
Attribute_Definition: User-defined feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers.
Attribute:
Attribute_Label: MAP_CODE
Attribute_Definition: A numeric representation of a map unit code
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique whole numbers.
Attribute:
Attribute_Label: MAP_UNIT_CODE
Attribute_Definition: A 2 to 6 alpha character representation of a map unit name.
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Textual - acronyms for map unit names.
Attribute:
Attribute_Label: MAP_UNIT_NAME
Attribute_Definition: Represents either a vegetation type(s) or a land use/land cover feature.
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Textual - names of the vegetation type.
Attribute:
Attribute_Label: COVERAGE_DENSITY
Attribute_Definition: It describes the coverage (a percent range) of the vegetation type that the map unit is representing within the polygon.
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Whole numbers in the percentage.
Attribute:
Attribute_Label: COVERAGE_PATTERN
Attribute_Definition: It describes the pattern or distribution of the vegetation type that the map unit is representing within the polygon.
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Textual.
Attribute:
Attribute_Label: HEIGHT
Attribute_Definition: It describes the average height of the woody terrestrial vegetation type that the map unit is representing within the polygon.
Attribute_Definition_Source: USGS
Attribute_Domain_Values:

Unrepresentable_Domain: Text and Whole numbers.
Enumerated_Domain:
Enumerated_Domain_Value: None
Enumerated_Domain_Value_Definition: This attribute was not applicable for this vegetation or land-cover type.
Enumerated_Domain_Value_Definition_Source: Florissant Fossil Beds National Monument, Colorado
Enumerated_Domain:
Enumerated_Domain_Value: 0-2 meters
Enumerated_Domain_Value_Definition: Height of the tallest stratum is estimated to be greater than 0 but less than 2 meters.
Enumerated_Domain_Value_Definition_Source: Florissant Fossil Beds National Monument, Colorado
Enumerated_Domain:
Enumerated_Domain_Value: 2-5 meters
Enumerated_Domain_Value_Definition: Height of the tallest stratum is estimated to be greater than 2 but less than 5 meters.
Enumerated_Domain_Value_Definition_Source: Florissant Fossil Beds National Monument, Colorado
Enumerated_Domain:
Enumerated_Domain_Value: 5-10 meters
Enumerated_Domain_Value_Definition: Height of the tallest stratum is estimated to be greater than 5 but less than 10 meters.
Enumerated_Domain_Value_Definition_Source: Florissant Fossil Beds National Monument, Colorado
Attribute:
Attribute_Label: DOMINANCE
Attribute_Definition: It describes the degree of mixes between evergreen and deciduous trees (and shrubs for some woodland types) within a polygon.
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Textual.
Overview_Description:
Entity_and_Attribute_Overview:
The National Vegetation Classification Standard is organized hierarchically to support conservation and resource stewardship applications across multiple scales. The upper levels of the hierarchy are based on the physical form or structure of the vegetation (physiognomy) and have been refined from the international standards developed by the United nations Educational, Scientific, and Cultural Organization (UNESCO). The two most detailed levels of the hierarchy are based on the species composition of existing vegetation (floristics) and reflect the phyto-sociological standards that were originally developed by European ecologists. The vegetation classification is continually advanced through the collection and analysis of new field data and will be greatly strengthened during the course of the USGS/NPS mapping efforts. Data file attributes include vegetation associations/land cover types, density, pattern, height, and dominance.

Associations/Land Cover types are defined by the MAP_CODE (Numeric), MAP_UNIT_CODE (UPPER CASE Alpha), and MAP_UNIT_NAME (UPPER and Lower Case Alpha) fields. The following list provides valid values for these three fields.

1 = ROAD = Roads
2 = VISITOR = Visitor Center
3 = SDF = Colorado Blue Spruce - Douglas-fir Forest
4 = SDAF = Colorado Blue Spruce - Douglas-fir - Quaking Aspen Forest
5 = BPW = Bristlecone Pine / Arizona Fescue Woodland
7 = PPW = Ponderosa Pine Woodland
9 = PPSBW = Ponderosa Pine / Smooth Brome Semi-natural Woodland
10 = BAPW = Balsam Poplar Woodland
11 = AF = Quaking Aspen Forest
14 = TAS = Thinleaf Alder Shrubland
15 = SSS = Silver Sagewort Dwarf-shrubland
16 = MMS = Mountain Mahogany / Mountain Muhly Shrubland
17 = SCS = Shrubby Cinquefoil Shrubland
18 = WROS = Waxflower Rock Outcrop Shrubland
19 = SHWS = Shortfruit Willow Shrubland
20 = SBWS = Sandbar Willow Temporarily Flooded Shrubland
21 = MWS = Mountain Willow Shrubland
22 = CTHV = Canada Thistle Herbaceous Vegetation
23 = DHV = Duckweed Permanently Flooded Herbaceous Vegetation
24 = THV = Toadflax Herbaceous Vegetation
25 = SBHV = Smooth Brome Semi-natural Herbaceous Vegetation
26 = SRHV = Aquatic Sedge - Beaked Sedge - Baltic Rush Herbaceous Vegetation
27 = POHV = Parry Oatgrass Herbaceous Vegetation
28 = AFMMHV = Arizona Fescue - Mountain Muhly Herbaceous Vegetation

29 = FBHV = Foxtail Barley Herbaceous Vegetation
30 = AFSMHV = Arizona Fescue - Slimstem Muhly Herbaceous Vegetation
31 = LBY = Little Bluestem Herbaceous Vegetation / Yucca Dwarf-shrubland

COVERAGE DENSITY (all vegetation map units)
1 - Closed Canopy/Continuous (60-100% coverage)
2 - Open Canopy/Discontinuous (25-60% coverage)
3 - Dispersed-Sparse Canopy (10-25% coverage)

COVERAGE PATTERN (all vegetation map units)
A - Evenly Dispersed
B - Clumped/Bunched
C - Gradational/Transitional
D - Regularly Alternating

HEIGHT (forest, woodland, shrubland, & dwarf-shrubland map units)
1 - 30-50 meters (98-162 feet)*
2 - 20-30 meters (65-98 feet)
3 - 12-20 meters (40-65 feet)
4 - 5-12 meters (16-40 feet)
5 - 0.5-5 meters (1.5-16 feet)
6 - <0.5 meters (<1.5 feet)

DOMINANCE/Co-dominance (forest & woodland map units, evergreen-deciduous mix)
D - Deciduous dominant 60-75%, evergreen 25-40%
E - Evergreen dominant 60-75%, deciduous 25-40%
M - Deciduous/Evergreen co-dominant, each 40-60%

Entity_and_Attribute_Detail_Citation: Grossman, D. Et al. 1994. National Park Service/ National Biological Service Vegetation Mapping Project, Standardized National Vegetation Classification System 209 pp.

Distribution_Information:
Distributor:
Contact_Information:
Contact_Person_Primary:
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization: USGS/BRD, Center for Biological Informatics
Contact_Position: Geospatial Technology Specialist
Contact_Address:
Address_Type: physical address
Address: USGS Biological Resources
Address: Center for Biological Informatics
Address: Denver Federal Center, Building 810
Address: Room 8000, MS302
City: Denver
State_or_Province: CO
Postal_Code: 80225-0046
Country: USA
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: 303-202-4219 (org)
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Resource_Description: Downloadable Data
Distribution_Liability: Although these data have been processed successfully on a computer system at the Rocky Mtn. Mapping Center, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a Rocky Mtn. Mapping Center, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The Rocky Mtn. Mapping Center shall not be held liable for improper or incorrect use of the data described and/or contained herein.
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:

Format_Name: HTML
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: http://biology.usgs.gov/npsveg/flfo/index.html#geospatial_veg_info
Fees: none

Metadata_Reference_Information:
Metadata_Date: 20021218
Metadata_Review_Date: 20060831
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Address:
Address_Type: mailing and physical address
Address:
U.S. Geological Survey, Center for Biological Informatics, MS 302,
Room 8000, Building 810, Denver Federal Center
City: Denver
State_or_Province: Colorado
Postal_Code: 80225
Country: USA
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Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part 1: Biological Data Profile, 1999
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Extensions:
Online_Linkage: http://biology.usgs.gov/fgdc.bio/bionwext.txt
Profile_Name: Biological Data Profile FGDC-STD-001.1-1999